

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

THE FARM INDEX

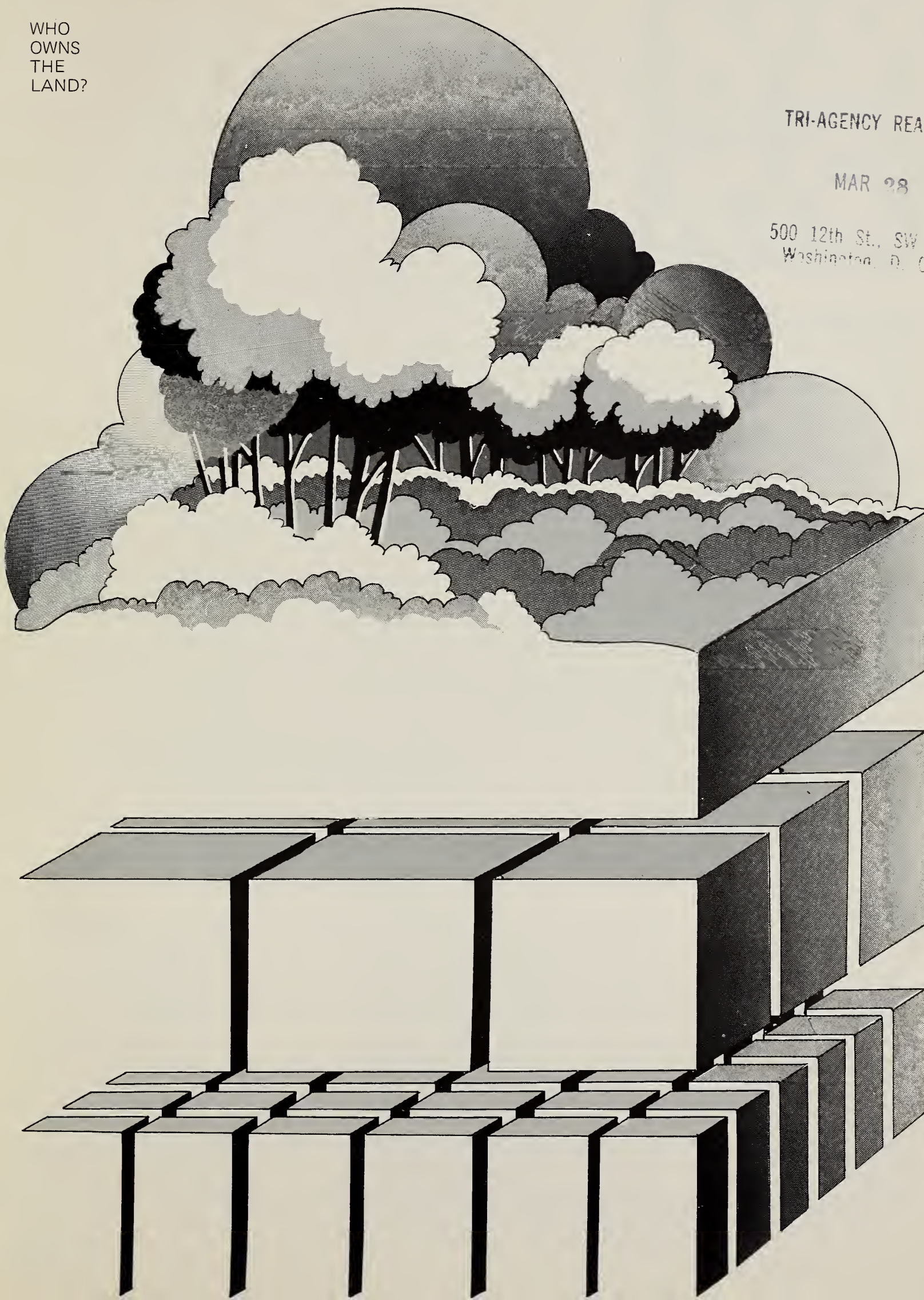
U.S. Department of Agriculture / March 1973

WHO
OWNS
THE
LAND?

TRI-AGENCY READING ROOM

MAR 28 1973

500 12th St., SW Room 515
Washington, D. C. 20250





OUTLOOK 73

After finishing off 1972 with a whopping \$19.2 billion in net realized farm income, America's farmers were told at last month's National Agricultural Outlook Conference: "This is an extremely difficult act to follow."

A pessimistic forecast? Not at all.

The way ERS views the situation, this year's net income should be a near record, second only to 1972's.

"Our forecast for 1973," said the Chairman of ERS's Outlook and Situation Board, "is essentially a bet on gross farm income and production expenses winding up in a near dead heat. It implies gross income coming on real

strong in the first half, then perhaps fading some in the stretch."

For the entire year, cash receipts from marketings are expected to climb 8 percent or more from last year's record \$58½ billion. On the details—

For livestock and products, farm prices may average at least 5 percent above those of '72.

Volume of livestock marketings will expand nearly 2 percent assuming ideal conditions.

Volume of crops marketed could show a 10-percent increase, with prices not quite 5 percent higher than in 1972.

Turning to prospects for specialized farmers—

✓ **Cattlemen.** Cash receipts from cattle and calves to nudge upward. Same goes for prices.

✓ **Hog producers.** Happy situation . . . bigger marketings and somewhat better prices.

✓ **Poultrymen.** Receipts up around \$¾ billion, eggs being the star performer.

✓ **Dairymen.** Cash receipts to bounce higher. Extent of the price rally will hinge on the level of price supports.

✓ **Wheat, corn, and soybean growers.** Larger crops than a year ago. Producers can look forward to a 25-percent gain in cash receipts for wheat . . . 30 per-

cent for corn . . . 15 percent for soybeans.

Taking a closer look at the crops picture—

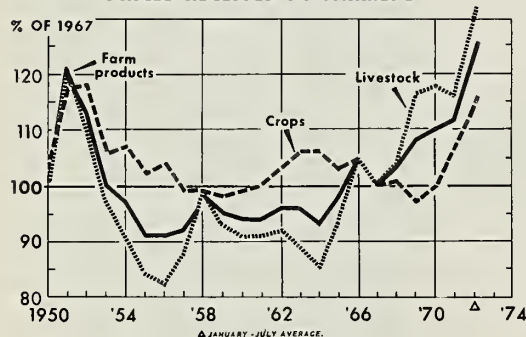
Wheat exports will scale to a new peak, an estimated 1.15 billion bushels for the 1972/73 marketing year.

Wheat usage on the domestic side is put at 818 million bushels and total usage at nearly 2 billion. This would leave a carryover next July of 440 million bushels, least since 1967. On wheat prices, look for 40-50¢ above the \$1.25/bu. loan rate of this season.

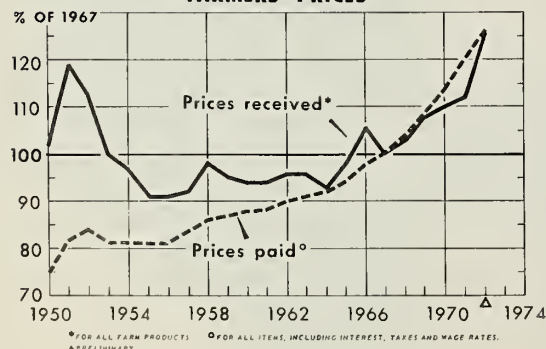
With favorable weather, the 1973 wheat crop this year could be substantially above the previous record of 1.6 billion barrels.

According to a special January 1 intentions report, farmers planned to boost 1973 feed grain plantings about 6 million acres. This survey was made before the required set-aside was eliminated from the wheat program, and modifications were made in the 1973 feed grain program which reduced the set-aside. These actions were expected to stimulate additional plantings. With a normal growing season, feed grain farmers could produce a crop that's well in excess of the standing record of 208 million tons, which was reached in 1971.

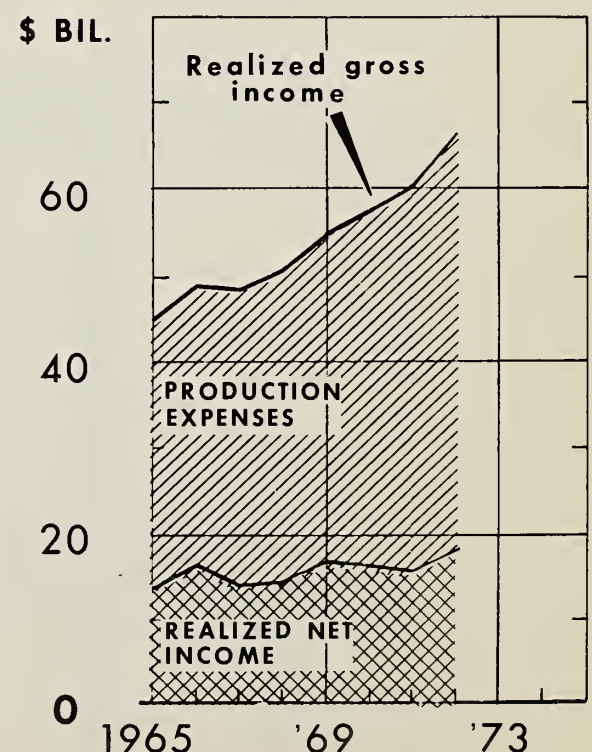
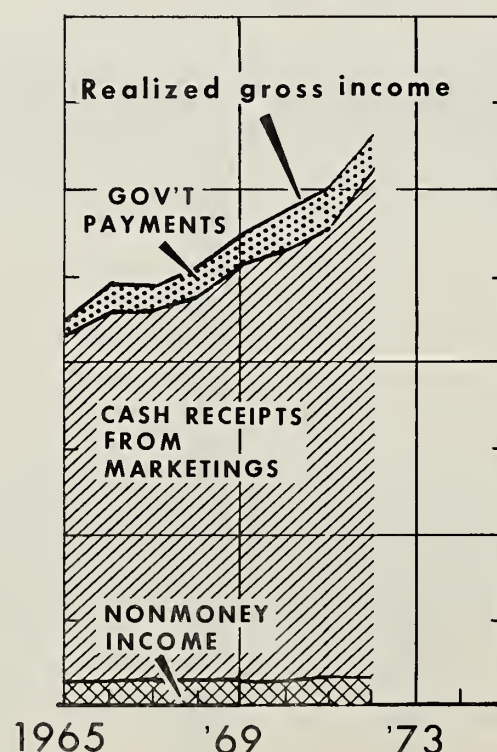
PRICES RECEIVED BY FARMERS



FARMERS' PRICES



FARM INCOME COMPONENTS



Contents

Production of soybeans, the Cinderella crop, continues to pile record upon record. This year's output is placed at 1.3 billion bushels. That's hardly enough to cover demand—domestic and foreign—and carryover will approximate last season's low level of 72 million bushels. Don't be surprised to see soybean prices averaging as much as \$3.75 a bushel—the most in history.

Farmers reported plans to plant 49 million acres to soybeans this spring in the January survey of planting intentions. However, with the changes in the wheat and feed grain programs, a further increase in soybean supply will likely exceed the 1969/70 record of 1.46 billion bushels, even with the carryover next September at the indicated low level. Such a soybean supply could ease the tight supply-demand balance.

Farmers will get lower payments from Uncle Sam in 1973. Direct Government outlays to farmers are going to slip by more than \$1 billion from last year's \$4 billion. Feed grains will be cut the sharpest, but wheat and cotton are also slated for reductions. Drop in payments is due to program changes designed to assure adequate supplies and to maintain stocks.

ERS figures realized gross income from farming in 1973 will round off to \$70 billion—roughly \$3½ billion more than last year. On the other hand, farmers should be prepared for a "strong upward surge" in farm production expenses—by more than the \$3.2-billion jump of '72 . . . and, possibly by more than the increase in realized gross income.

Prices of purchased feed shot up 30 percent in January 1973 compared with a year ago, and will probably stay above a year earlier until next fall. Also, more livestock will be raised this year, and this will swell feed expenses even more than last year.

It's for items produced on farms, rather than inputs of nonfarm origin, that farm costs will escalate the most. But farmers will handle those charges by borrowing more money. And, short term interest rates will creep up only slightly, maybe by half a percentage point.

(Continued on page 22)

FARM

RURAL

SPECIAL REPORTS

CONSUMER

FOREIGN

Martin Schubkegel
Editor

Diane Decker
Diana Morse
Walter M. Patrick
Staff Editors

Contents of this magazine may be reprinted without permission. They are based on research of the Economic Research Service and on studies done in cooperation with State agricultural experiment stations. Use of funds for printing this publication approved by Director of the Office of Management and Budget, May 24, 1972. Subscription price: \$3.50 yearly (4.50 foreign). Single copies 45 cents. Order from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

Features

- 4 The Farmer and the VAT**
Special treatment might be needed for agriculture if and when the U.S. adopts a value added tax
- 7 Who Owns the Land?**
How the Nation's more than 2 billion acres are divided up
- 12 Economics: Cornerstone of Policy**
Policy questions continue to challenge agricultural economists
- 14 Hitting the Honey Jar**
There's a beehive of activity around this "nature" food
- 17 Corn on the Continent**
Production's flourishing throughout West Europe

Departments

- 2 Outlook**
- 20 Article Sources**
- 21 Recent Publications**
- 23 Economic Trends**

The Farm Index is published monthly by the Economic Research Service, U.S. Department of Agriculture, March 1973. Vol. XII. No. 3.

NOTE: The numbers in parentheses at the end of stories are intended for readers who wish to write us for additional information. See page 20 for details.

THE
FARMER

THE
VAT



There's more than one type of value added tax and more than one way to apply it. Whatever the method, special allowances might have to be made for agriculture.

If and when this country takes to the value added tax, special provisions might be needed to lighten the load on farmers.

Practically every nation now using the value added tax (VAT) gives agriculture some kind of special treatment. They do so on these grounds—

✓ VAT is hard to administer when dealing with large numbers of small farms.

✓ Small farmers have problems keeping the records for levying the tax.

✓ Agricultural products should be taxed at a lower rate than others so as not to create hardship for lower income families, who typically spend a large share of their incomes on food.

✓ Preferred treatment of farmers as providers of necessities is in the national interest.

VAT comes in three varieties, but the one used by most other countries—and most often mentioned as a possibility for the U.S.—is the consumption type. In concept it is a tax on general consumption. It is not a tax on retail sales, since the VAT is levied at each stage of production. However, the consumption type of VAT can lift the price paid by consumers.

Puzzler. How much of the VAT is shifted to the average shopper is debatable. Tax experts themselves can't agree on VAT's contribution to price hikes in the midst of general inflation.

Theoretically the full tax can be passed on to the consumer. This in fact was the expressed intention of the European Community (EC) when it first imposed the VAT in the late 1960's as a replacer for a turnover tax. EC members, by the way, rely on the VAT for 24 to 40 percent of all tax revenues.

In the EC the VAT works like

this, albeit oversimplified:

Each time a product changes hands the government collects a tax on the value added by the firm (gross sales less cost of purchased inputs). The firm then passes along the tax in the form of higher prices, and gets reimbursed for the tax by the next firm in the production-distribution chain.

In practice, however, the forward shifting of VAT doesn't quite mesh with theory. "Backward" shifting of the VAT is not uncommon; i.e., a firm pays its factor suppliers a lower price, forcing them to bear all or a portion of the tax. Or a firm decides to absorb all or part of the VAT itself rather than lose a sale.

And, some industries—especially those less concentrated—are less likely than others to push the tax forward. Agriculture is among those industries.

"Price takers." As the economists say, farmers in the short run are "price takers," meaning they have limited ability to control their supply and thus the price they ask for their goods. So, they accept a lower price in order to move the merchandise.

On balance it would seem U.S. agriculture would not be in a favorable position relative to other industries. Agriculture would probably be forced to absorb part of the VAT, particularly in the short run. Meanwhile, the farmer as a consumer would still bear some of the VAT.

The burden on farmers would be even heavier if they ended up being saddled with more VAT on purchased inputs than they were able to shift forward on their sales . . . all the more reason for special treatment for agriculture.

Why not simply exclude agriculture from VAT coverage?

Poor alternative. Exemption is not the answer, says one ERS tax specialist. Farmers would still be subject to the VAT on what they buy to run the farm business. Outside the VAT umbrella they'd have no way of

offsetting the tax paid on inputs.

The EC likewise recognizes that exclusion from the VAT would penalize farmers rather than help them. But to make things easier, the EC Council offers a plan whereby farmers can be relieved from keeping purchase invoices and from direct liability under the VAT. Agriculture is not exempt, however, as the liability for the farmer's VAT is assumed by the purchaser of farm output.

The EC's handling of the VAT is being closely examined by tax experts in this country. Most of the current literature on the VAT, and whether it should be built into the U.S. tax structure, draws on the EC's

A VAT of Controversy

The value added tax—a place for it in the U.S. system? Americans have been asking the question for more than 50 years.

The VAT was first suggested in this country in 1921 by T. S. Adams, long-time adviser to the Treasury Department, not long after the VAT was conceived in Germany by von Siemens.

In 1929 a similar proposal was put forth by General Electric. Calling it a "production tax," GE favored substituting VAT for the corporate income tax. Three years later the Ways and Means Committee of the U.S. Congress gave some consideration to a VAT as an alternative to a proposed manufacturer's sales tax.

In the late 1930's the National Tax Association, after years of study, advised the Federal Government to impose a VAT.

In 1953 Michigan passed into law a variation of the VAT—on business activities—but dropped it 14 years later.

In 1964 the House Ways and Means Committee again reviewed the VAT in connection with income, excise, and sales taxes.

More recently, the Advisory Committee of Intergovernmental Relations has recommended against enacting a Federal VAT to provide revenue for property tax relief, saying the States should retain primary responsibility for school financing and property taxes.

experience with this system.

The trouble is, the stated goal of the EC's VAT is to make the consumer bear the full tax. That's precisely what many people in this country don't want. Yet there's more than one way to apply the VAT.

Since the EC views the VAT as a direct consumer tax, it has chosen the method for tax computation that best suits the objective. The "credit" method, as it's known, operates as in the example given earlier.

Alternative methods are available that would minimize the forward shifting of the VAT for all industries. The alternatives—"addition" and "accounts"—basically provide for a tax on wages and profits and other production factors. But the VAT would be computed from information generally contained in existing tax forms, and paid along with other business taxes. It could still be shifted indirectly, though the odds of this happening are less than under the EC's credit method.

Without going into detail here, the addition method especially lends itself to charging variable rates of taxation when the object is to give special treatment to certain industries such as farming.

Turning to the proposals for a VAT in this country, most center around using VAT to finance education, replacing all or part of the property tax. Farmers obviously would be affected. In a recent year they paid taxes on farm property of nearly \$3 billion—or about 9 percent of total property collections.

Fatter tax bills? Under one proposal farmers wouldn't get much tax relief. This proposal calls for a Federal VAT to take the place of State and local taxes on residential property only. States would still be permitted to levy a tax on nonresidential property such as farmland. Since farmland is generally underassessed compared with other types of property, there's a strong possibility of raised assessments followed by fatter tax bills should assessment be centralized in the States.

If, on the other hand, all property

taxes are replaced by a VAT, then farmers might come out ahead of the game.

The latest data for estimating the benefits to farmers are for 1963. Had there been a VAT that year, the burden on agriculture would have come to roughly \$1.3 billion—slightly less than half what farmers paid in real estate taxes.

Suppose prices paid farmers failed to rise in line with the VAT costs? Under the worst possible assumptions, farmers' VAT payments would not be much higher than the property taxes they pay now. (5)

Spanish Migrants Cite Urban Adjustment Snags

Adjusting to a new community is generally a one-sided affair—most of the burden falls on the newcomer.

Seeking ways to make the community more responsive to the special needs of Spanish-speaking migrants in Seattle, ERS surveyed heads of 100 migrant households. Seattle's Spanish-speaking population numbers close to 11,000.

Over four-fifths said they moved to Seattle mainly to improve their economic situation. Almost a tenth of the respondents relocated to be nearer relatives already in the Seattle area.

Asked to name their most pressing problem, 45 of the household heads mentioned lack of opportunities to obtain additional training and education. Inability to find higher-paying jobs ranked second.

Discrimination—usually by employers or potential employers and other non-Spanish-speaking workers—was cited by roughly two-fifths of the respondents as a roadblock to higher social and economic levels. A third said their deficiency in English posed a serious handicap.

Most of the survey group relied heavily on relatives and friends in making the adjustment to Seattle life. Few sought assistance from public agencies or leaders in the Spanish community.

In fact, 3 of 5 household heads

could not identify any of the leaders of Seattle's Spanish-speaking community. Three-fourths knew of no agencies that offered help or information about jobs, housing, health care, etc.

To help close this gap between the need for, and provision of, public assistance, the survey team recommended the establishment of an information agency that could aid the migrant in adjusting to his new surroundings.

Among its services, this "early arrival" buffer agency could acquaint migrants with employment opportunities and direct them to appropriate public assistance agencies. In effect, the buffer service could shorten the migrant's adaptation period.

Another community program could help adults broaden their proficiency in English by expanding opportunities for classroom instruction. Also, employment of more bilingual people in public agencies might improve communications and reduce the reluctance of Spanish-speaking people to seek assistance. (3)

Pesticide Bans Exact a High Price

Environmental quality can be costly.

In the farm sector, chemicals in pesticides have contributed to pollutants in the environment. Yet no one can discount the role of pesticides in boosting yields, cutting production costs—or holding down consumer prices.

Public discussions and hearings weighing the merits and drawbacks of certain pesticides—and the impact of banning them—have been underway for several years. ERS has provided backup material for these hearings with several studies measuring the cost to agriculture if specific pesticides were banned.

One study dealt with DDT. Using 1969 as a base period, ERS found that a ban on DDT would double the annual cost of pest control in cotton production from \$55 to \$110

million. For growers, the cost would jump to \$20 per acre. Effective Dec. 31, 1972, interstate shipments of DDT for all uses except public health and a few small agricultural operations were cancelled.

Much discussion has centered on halting use of the herbicide 2,4,5-T. Rice is the only food crop that would be seriously affected, though uses of 2,4,5-T are widespread.

Basing its estimates on 1971 rice production, ERS determined that a ban on 2,4,5-T would lower growers' net income by \$4.3 million a year, due to reduced yields and poorer quality of rice. Farmers in Mississippi, Louisiana, and Arkansas would be hit hardest.

In the Corn Belt, farmers are increasingly concerned over the possible loss of aldrin and dieldrin—used to curb soil insects in corn production. If both are banned, ERS estimates that farmers' costs could rise by \$48 million in the U.S., of which \$30 million would be borne by corn producers. The figure reflects higher pest control costs as well as income losses from lower yields.

Separate studies on heptachlor and chlordane revealed that a ban on these insecticides would raise production costs by a total of \$4 million. Again, corn farmers would bear the brunt.

One of the uncertainties in determining the costs that result from bans on certain pesticides is to know what products can substitute, and not themselves be subject to future bans.

For example, researchers assumed toxaphene and methyl parathion could pinch-hit for DDT. If either or both were banned sometime later, estimated pest control costs would be far higher than \$110 million.

Toxaphene is the subject of an upcoming ERS cost study. Also under scrutiny are endrin and lindane, pesticides used in fruit and cotton production; and benzene hexachloride (BHC), used by the livestock sector. (4)

It's a simple question with complex answers, an ERS study shows. Here are some of the facts about who controls our farmland, forests, and other natural resources.

No one knows precisely how many people own land in America.

Most of the Nation's 2.3 billion acres are in the hands of private landholders, either individuals or corporations. They own nearly three-fifths of the land.

Federal, State, and local governments own the rest, with an additional 50 million acres held in trust for Indian tribes and individuals.

This proportion of private to public land ownership has been remarkably stable for the past 50 years. The biggest change came in the 1950's when Alaska and Hawaii became States and increased Federal lands from about a fifth of the total U.S. land area to about a third.

By far, the biggest share of the Nation's land is in farms—slightly over 1 billion acres in 1969. Almost all of the cropland and most of the grazing land is owned privately.

Forest land ranks next, accounting for three-quarters of a billion acres in 1969. Well over half of the forest land is also in private ownership.

The rest—some 430,000 acres—are sites for cities, transportation, recreation, wildlife, public facilities, farmsteads and farm roads, and swamp, mountain, and desert areas.

Farmland holders. While the Nation's farmland makes up the biggest proportion of the land, ownership is concentrated in the hands of an estimated 4 million people. And ERS estimates that about 1.4 million of these owners do not themselves operate any of the agricultural land they own.

In day-to-day operations decisions about the use of farmland are in the hands of the 2.7 million farm operators. Ninety-eight percent of all sales of farm products, however, are made by only 1.7 million op-

WHO OWNS THE LAND?



erators of farms with annual sales of \$2,500 or more.

About half of the land in farms is operated by part-owners . . . more than a third is operated by people who own all the land they farm . . . and about 13 percent, by tenants, who own none of the land

on which they farm.

In terms of ownership, farm operators owned about 68 percent of the farmland in 1969, or about 722 million acres.

However, they did not necessarily operate all the land they owned. For example, full owners held

nearly 413 million acres of farmland in 1969, but they operated only about 375 million acres. They rented the rest to either part-owners or tenants.

On the other hand, about 13,000 tenants reported that they owned some farmland—in total, about 4.5 million acres—which they rented out to other farm operators.

In addition, about 7.2 million acres of farmland is subleased by farm operators to other operators.

Why rent? The motives for leasing and subleasing land frequently relate to an operator's desire to put together an economic operating unit. For example, a farmer may decide to rent a larger or better farm—and thus be classified as a tenant—rather than operate just land that he owns. Many full-owners rent out part of the land they own in the process of reducing their farming operation as they approach semiretirement.

Of the total cropland—some 475 million acres, just about 99 percent is privately owned. Grassland pasture and range—over 600 million acres—are about 60 percent privately owned.

This total of some 1 billion acres has stayed just about the same for the past 30 years.

Forest land breakdown. Unlike cropland, a sizable chunk of the Nation's more than 750 million acres of forest is owned by the public. About 316 million acres are in the hands of Federal, State, and local governments.

Forest land has a number of major uses—including timber, recreation, water, and forage for domestic and wild animals.

But in classifying forest land, one major criterion is its productivity for wood growth.

The U.S. Forest Service classifies forest land as "commercial" if it is capable of producing 20 cubic feet of usable wood per acre each year.

By this classification, nearly 70 percent of the Nation's forest lands are "commercial." Some of this is reserved for parks and wilderness

areas, but there are about 500,000 acres that could contribute to our wood needs.

Nearly 3 out of 4 acres of this commercial forest land are privately owned. Most of this privately owned land—88 percent—is east of the Great Plains.

"Commercial" ownership. The forest industry owns nearly 14 percent of the commercial forest land and public lands account for another 27 percent. But small, private owners account for the greatest bulk of the Nation's commercial forest land. They hold 60 percent of it.

In the two most productive regions, the South and the Pacific, the forest industry owns about 18 percent of the land. Private owners with small tracts—usually under 60 acres—hold more than 70 percent of the forest land in the South and 20 percent in the Pacific region.

In the East as a whole, small owners hold more than 70 percent of the commercial forest land.

Insofar as the potential problems of forest land use can be identified with ownership, it appears that increased wood production in the East will depend heavily on the management decisions of small tract owners.

In the western regions, management decisions will be dominated by the public owners together with industrial owners in the Pacific States.

ERS notes that from 1950 to 1970, small, nonoperating owners—and to a lesser extent, the forest industry—have expanded their acreage. During the same period, the acreage of forest land on farms declined.

Federal landholdings. Of all the public landholders, the Federal Government is by far the biggest.

It owns 1 in 3 acres in the U.S. for a total of 762 million acres.

The land is diverse—from the tropical soils and vegetation of Hawaii and Florida to the tundra of Alaska.

All told, some 37 Federal agencies administer these lands. Two

agencies—the Bureau of Land Management and the Forest Service—administer 87 percent of Federal lands. Other Federal agencies that administer large acreages of public land include the Department of Defense, the National Park Service, and the Bureau of Sport Fisheries and Wildlife.

Most of the Federal lands are in 11 Western States. And in those States where the Federal Government is a principal landowner, the management and use of the land significantly affect State and local economies.

Federal lands produce a wide range of products, including timber, forage, and minerals, and they have an abundance of resources, such as water, fish and wildlife, and outdoor recreation sites.

Nearly 100 million acres of Federal land are classified as commercial forest and are managed to maintain a sustained yield of wood products. This area represents about 20 percent of the Nation's commercial forest land. Nearly 40 percent of the Nation's supply of marketable timber and more than 60 percent of its softwood sawtimber are on land owned by the Federal Government.

Big bite. Livestock grazing is the most widespread use of Federal lands, with well over 1 in 3 acres used for this purpose. Although Federal lands account for only about 3 percent of the total forage consumed by livestock in the U.S., they provide at least seasonal grazing for more than 4 million cattle and 9 million sheep.

In some States and local areas, Federal lands are especially important. In Nevada, Federal lands provide about 45 percent of the total feed requirements for beef cattle and sheep, and in Utah, 30 percent.

Minerals on Federal lands also constitute a resource of great national importance. In 1968, 6 percent of the Nation's oil production came from Federal lands. Some 64 million acres were under lease for oil and gas. More than 8,200 pro-

ducing mineral leases generated royalties to the Federal Government of more than \$92 million.

Much of the national production of copper, nickel, silver, lead, molybdenum, potash, and mercury comes from Federal land.

The Federal Government may also be considered the Nation's principal supplier of outdoor recreation facilities.

It owns more than 33 million acres that are truly unique in terms of scenic or natural attributes, in-

cluding national parks, monuments, scenic and wild rivers, wilderness areas, and seashores.

Federal lands provide not only habitat for much of the fish and wildlife in the country, but also access to fishing and hunting. Some 17 million acres are set aside for resident game species, and 9 million acres are set aside as migratory bird refuges. Of particular importance is the dependence of big game for habitat on Federal lands.

Federal lands are the principal

source of water for many of the arid areas of the West. They provide about 61 percent of the natural runoff in the 11 conterminous Western States, with the bulk of the runoff coming from land administered by the Forest Service.

Altogether, much of Federal land is used for several purposes. Thus, acreages given here for specific uses don't necessarily add up to the total acreage for land controlled by the Federal Government. (1)

[Fourth in a series.]

WHO OWNS OUR WATER?

Water "ownership"—or water rights—is a whole new ball game compared to land ownership.

The country tends to be divided down the middle on State water rights laws, which generally decide who owns what. And, climate heavily influences our water rights laws.

In the humid East, water rights generally go to the person whose property adjoins the stream in question. This stems from the doctrine of riparian rights, riparian referring to the bank of a stream. The doctrine was readily adapted to the East by early settlers, who found the water supply much like that of their native England.

However, in the more arid West, preferred water rights generally go to those who tap the stream, regardless of whether or not their property adjoins the stream. This, the "prior appropriation doctrine," opened the way for extensive irrigation development.

In the hot and arid West, rain usually doesn't come when it's most needed by agriculture. Thus, irrigation generally is a necessity to raise crops and is taken into consideration in the case of water rights.

The two doctrines are the basis for most of the water rights laws regarding watercourses in the country. The riparian doctrine exists in the 31 States lying east of Texas and the Dakotas. This is subject to permit requirements in some States and to public rights in navigable waters. It also exists along with the appropriation doctrine in some Western States. The appropriation doctrine exists in most of the 19 Western States and in some degree in some Eastern States.

There also are various State water-rights laws regarding ground waters and diffused surface waters.

Federal and local governments also exercise some control over water resources that may affect water rights. Federal areas of concern may include navigation, flood control, irrigation, hydroelectric power, water supply, watershed protection, fish and wildlife preservation, recreation, and water quality. Local government regulations prevail in some areas where States have delegated the authority to the local level. (2)



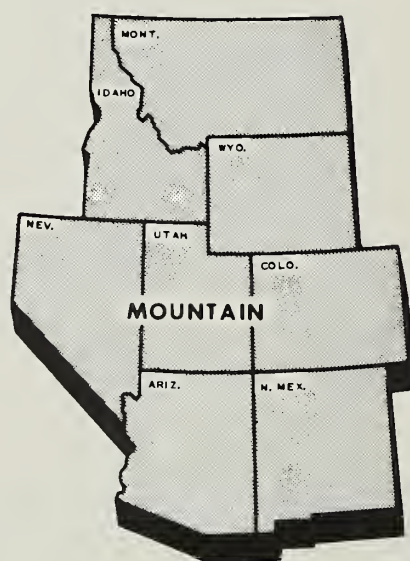
Out West, water rights are one of the prime determinants of land value.

FARM FINANCE— THE '73 OVERVIEW

There's some doubt whether net income of the Nation's farms will reach above last year's record, yet farmers' overall financial condition is expected to be better than in 1972. Loan funds will be ample . . . and interest rates, not much higher than present levels. Commercial banks, production credit associations, and other short- and intermediate-term lenders anticipate no problems in meeting farmers' credit needs. Here, on-the-scene reporters give the outlook for the 10 farming regions.

Strong year. Financially, it's going to be another strong year for farmers and ranchers in the Pacific region. Production and prices are expected to be good on the whole. But production costs may rise higher than in '72, and uncertainties cloud the egg industry following the attack of Exotic Newcastle disease. Other unknowns: the extent of freeze damage to California's fruit and nut trees; the export demand for cotton; and what will happen to livestock prices this year.

With some exceptions, the debt and credit situation is shaping up to be about the same as in late 1972. Though interest rates may rise a bit, credit will be adequate and farmers will use large amounts. Few problems are foreseen in handling the bigger debt load, barring unexpected changes in production or prices. One reporter said farmers are optimistic, but cautiously so. Few are likely to make investments and undertake long-term debts that require a continuation of the good incomes of 1972.



Better than '72? Many reporters in the Mountain region think so. Optimism is the byword when discussing 1973 production and prices. Fall seeded wheat might produce a record crop in several areas—grazing conditions seem good—and irrigation supplies are plentiful. Too, there's an upbeat feeling about feeder cattle prices.

Nevertheless, livestock men wonder whether returns from fed cattle will be enough to cover the cost jumps for feed and feeder cattle. Loan demand will be active and funds ample.

To sum up: good income prospects and probability of higher asset values this year.

Generally optimistic. Adequate soil moisture in most areas presages an excellent winter wheat crop in the Northern Plains. Cattle are in good condition, livestock prices are currently strong, and favorable grain prices are expected to hold well into the year.

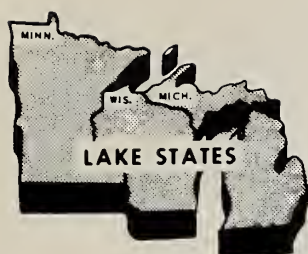
Despite the mood of optimism, many reporters doubt net farm incomes will exceed the '72 levels and they might drift lower. The high cost of buying and feeding cattle would spell trouble for some cattle feeders if fed cattle prices decline substantially. There's also a feeling that inflation might cause a spurt in taxes, labor charges, and machinery costs. Farmers will use more credit in '73. Several reporters believe short-term interest rates will edge up, but that farm mortgage rates will change little.



Yields vital. Southern Plains farmers may need record yields this year to take in a larger gross income than in '72. At least, that's the opinion of some reporters. They also see sizable leaps in production costs on the horizon. Nevertheless, the overall debt and financial position of this region's farmers should be on a par with 1972, a relatively good year.

Demand for credit will set a brisk pace. Though some reporters wouldn't speculate on interest rates, others expected upward pressure around mid-year, especially for short-term credit. The supply of funds will be adequate for sound loans.





Bullish on livestock. The Lake States rely on livestock for 70 percent of farm income, and reporters believe livestock prices will stay on the high side. Income from cash crops will also inch up unless adverse weather of '72 is repeated.

On credit, some reporters expect lenders will demand more collateral this year, reflecting the poor harvest in '72 and the large percentage of part-time farmers who don't look to farming as their main source of livelihood.

Land values will keep climbing in 1973 as more urban workers seek rural homes. Some reporters see downward pressure on land values in areas with weak urban demand. Also, potential farmland buyers, who would use the land for agriculture, are discouraged by last year's bad weather.



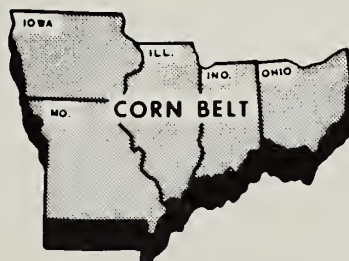
Crop shifts. Using their land to its best advantage, producers in the Delta this year are taking some acreage out of cotton and putting it into soybeans. Rice area will also get a boost. Expectations of good years ahead for beef prices will keep up the pressure for expansion of cattle herds, though the buildup in hogs and broilers may be held in check by feed costs.

These factors in particular are pushing up costs of farming—the ban on DDT, resulting in extra expenses for substitutes; climbing wage rates; and bigger price tags on farm machinery.

Gross farm income might not match 1972's, but there should be no lack of credit at interest rates near last year's.

Busy spring. Net farm income in the Corn Belt should at least equal last year's. Better grain prices will partly offset weather damages to the '72 harvest. In many areas, however, normal fall plowing was impossible. This will add to the spring workload and may delay planting of corn and soybeans.

Costs of farming in the Corn Belt will outpace last year—mainly for farm machinery, labor, and seed. And farmers in many areas may have to borrow to meet obligations that normally would have been paid out of '72 fall marketings, which were delayed. Lenders generally believe interest rates will keep close to late '72 levels for long-term loans, with likely increases in short-term rates.



Gross to grow. Southeastern farmers figure their gross receipts will bulge somewhat this year, and they're planning to up investments in capital improvements and in larger machinery.

Crop producers anticipate good prices for tobacco, citrus, and small grains. Though cotton output might slip with reduced allotments, the net result might be better prices.

Livestock growers should continue getting relatively high prices for cattle, but hog, broiler, and egg producers might not fare much better than in '72. In fact, many marginal poultrymen might be forced out of business. Credit demand will remain strong. Most lender reporters expect



interest rates to approximate 1972's; any movement would be upward. Except for a few cases, loans will be available to credit-worthy farmers from usual sources.



Net gain. Farmers in the Northeast look forward to improved net income from higher prices for crops and livestock. But for

dairy farmers, net returns might shrink because of rising feed costs and poorer quality of homegrown feed. Off-farm employment opportunities—essential for many farmers in the Northeast—appear as good if not better than last year.

Though loans will be readily available through most of this region, some farmers will be financially hard pressed following a year of unfavorable returns and low repayments on operating loans. Correspondents indicated that with this group of borrowers, institutional lenders will apply strict rules of credit.

Hurricane Agnes was especially devastating to the Northeast, where many farmers sustained large losses in '72.



Balancing out. With farm expenses expected to go up about as fast as cash receipts, there will be little difference in this region's net farm income compared with 1972's. And, farmers' overall financial condition won't change much, since increases in debts will almost cancel out the gains in asset values.

Demand for credit will be spurred by growing use of purchased inputs and higher-priced machinery—especially harvesters for flue-cured tobacco and fresh vegetables—by land purchasers for farm expansion, and by ample loan funds. Prices for farmland will keep on their upward course, the sharpest advances being near centers of development. (7)

Economics: Cornerstone Of Policy

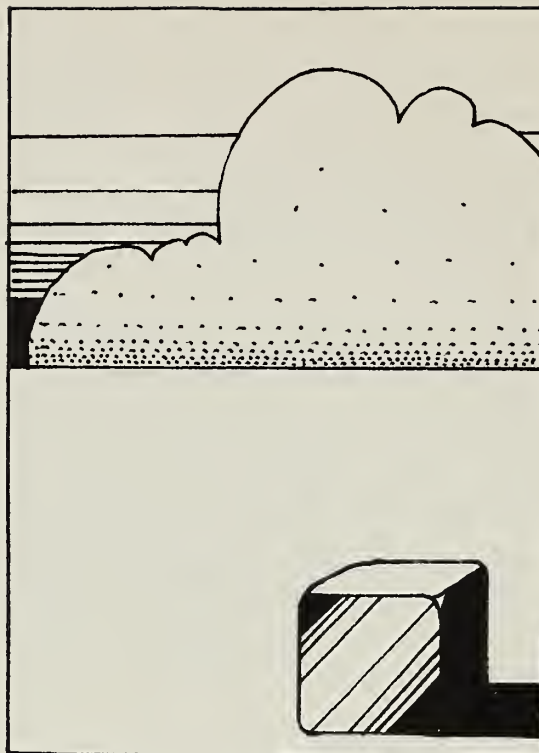
The United States has had an agricultural policy of one sort or another since at least 1619, the year colonists at Jamestown passed an inspection law directing that all tobacco of "mean" quality be burned.

Yet agricultural economic policy, as we know it today, is a fairly recent thing, developed only within the last 40 or 50 years. In that brief period, agricultural economists have become central to policy, both as theorists whose ideas are incorporated into law and as workhorses whose day-to-day analyses provide the information that keeps the farm programs running.

Before World War I, people who thought about agricultural policy at all usually did so in terms of tariffs, monetary and banking practices, and the sale and improvement of public lands.

Prices skid. With the coming of the post-war depression, that began to change, however. The hard times of the 1920's affected more than just farming, but as one observer has written: "Agricultural prices fell first, fell fastest, and fell farthest." What's more, the prices of several important farm products stayed chronically low. By 1921, hog values had plummeted to \$8.21 a hundred-weight, corn sold for 52¢ a bushel, wheat for \$1.03.

As the depression deepened, George Peek and Hugh Johnson, two executives at the Moline Plow Company in Illinois, realized that their declining sales were tied to the country's low farm incomes. "You can't sell a plow to a busted customer," was the way



Peek summed up the situation.

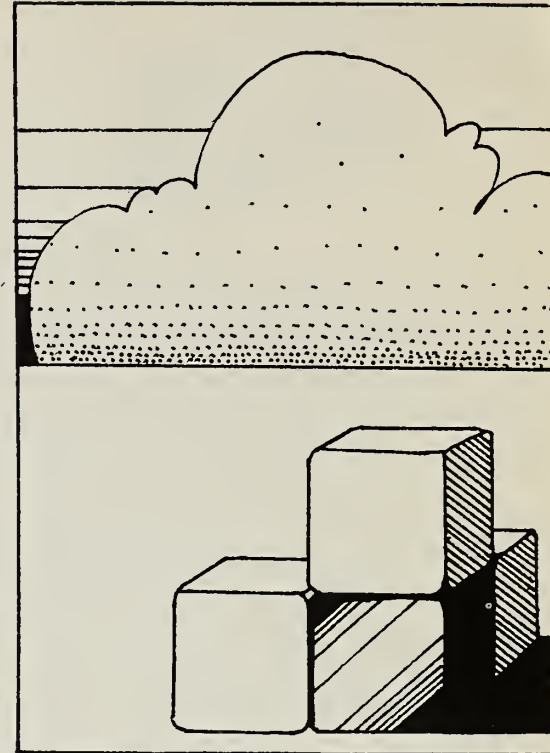
Together they created a plan of attack on the problem that drew heavily on data developed by agricultural economists, most notably on the work of Cornell professor George Warren.

Basically, their scheme was to use Government purchases to support domestic farm prices at their pre-war buying level (in other words, at parity) while selling surplus production in overseas markets.

The proposal was short on details and at first glance appeared impractical, two points that scared off most economists. But it got a hearing at USDA, and by late 1923 Henry C. Taylor, Director of the Bureau of Agricultural Economics (BAE), had his researchers at work ironing out the rough spots.

Within months, BAE members incorporated the Peek-Johnson plan into the best known, most controversial farm legislation of the 1920's—the McNary-Haugen Bill, so named after its sponsors in the House and Senate.

The measure was introduced into Congress three times during the twenties and came within a hair's breadth of enactment in 1927. But it was never signed into law, partly because the conventional wisdom of the period—plus the wisdom of a great



many agricultural economists—said the way to deal with surpluses was through cooperatives.

Trial and error. In fact, the Government tried this approach in 1929 with an agricultural marketing act that created the Federal Farm Board as an aid to the cooperative movement.

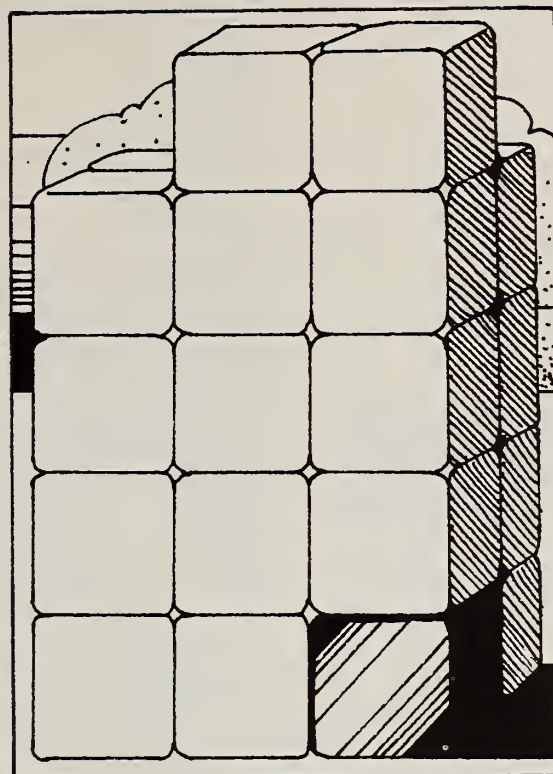
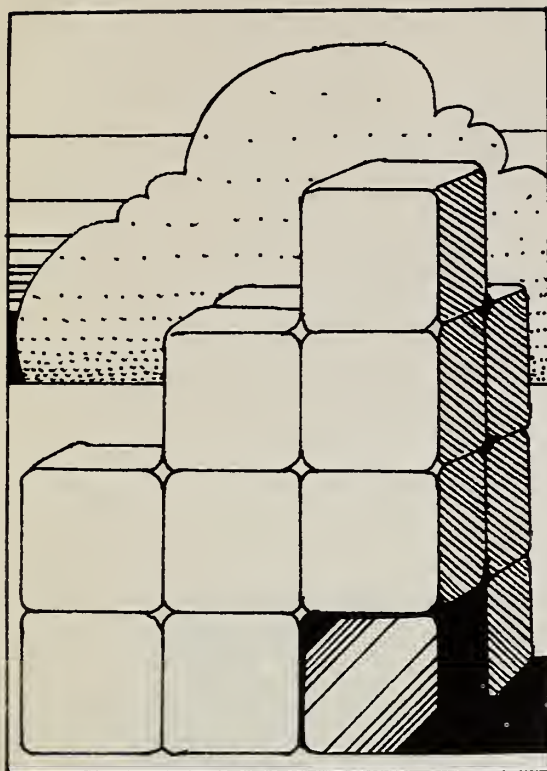
It didn't work.

In 1932, when the Board acknowledged its own failure, farm operators' net incomes were less than a third of what they had been in 1929, and farm prices had fallen by better than 50 percent.

Surpluses, together with a worldwide agricultural expansion that greatly reduced the possibility of overseas sales, accounted for much of the disaster. And as the Farm Board expired, it made a plea for restrictions on production.

The Department's economists were ready with an answer that had been bubbling on a back burner ever since 1927 when BAE staff member W. J. Spillman published a slender volume called *Balancing the Farm Output* that contained the seeds of what came to be known as the domestic allotment plan.

As it took shape, the allotment plan sought to enlist the Government's power to help farmers control



production, thus enabling them to balance supply with demand and achieve some of the marketing advantages enjoyed by other businessmen.

Harvard's John D. Black was one of the first to develop Spillman's basic proposal; he published his refinements in 1929 as part of *Agricultural Reform in the United States*. But by the time the Farm Board failed, yet another researcher, M. L. Wilson, was the measure's leading advocate.

With help from several fellow economists, especially Black, Howard Tolley, and Mordecai Ezekiel, Wilson refined the plan, adding new ways to control production and finance and administer the program. When he finished, he had chiseled a cornerstone for the New Deal's agricultural legislation.

Combining ideas. Beginning with the Agricultural Adjustment Act of 1933, the Roosevelt Administration took Wilson's ideas along with those of a number of other agricultural economists and built them into an interrelated set of laws to salvage the Nation's farming.

Some of the concepts that thus became policy had been developed in the BAE and the country's universities during the twenties and

early thirties. Others emerged as the decade progressed. By the close of the New Deal, however, the United States had a farm program that is still largely intact 40 years later, and it owed much of its character to agricultural economists.

Among their contributions economists helped lay the foundations for domestic allotments, direct Government purchases, nonrecourse loans, the set-aside program, the Commodity Credit Corporation, and the ever-normal granary method of insuring stable domestic food supplies.

There was more. As part of its new role in the thirties, the Government acquired sizable quantities of surplus commodities, some of which it began disposing of via direct distribution programs to the hungry and through school feeding programs designed to raise child nutrition levels.

Both measures depended on nuts and bolts work done by economists. And in 1938, it was an economist, Frederick Waugh, who sent USDA Secretary Henry A. Wallace a memorandum containing the nucleus of the Food Stamp Plan, today one of America's chief weapons in the fight against hunger.

Having played a major part in

building the new policy, agricultural economists were the ones who furnished fuel for its operation. For they, almost alone, were able to analyze the farm programs' effects and forecast the results of possible modifications. Throughout World War II, right down to the present, they have provided the data and projections that are crucial to policymakers charged with overseeing the agricultural sector.

Underlying these activities, and at the heart of almost all policy, is an issue that has never been entirely resolved: what specifically is agriculture's role in a normally functioning American economy?

The answer is elusive, mainly because the general economy and the farm sector have both been changing by quantum leaps during the last half century.

Revolution. Throughout much of that period, the economy as a whole has been disrupted, either by depression or war. More recently, the country's agriculture has revolutionized its production and organization.

No longer, for instance, does a farmer necessarily buy his inputs, then raise his crop and sell it to a processor who in turn sells it to a wholesaler from whence it goes to a retailer and, finally, to the consumer. In some cases—poultry is a good example—all those steps can now be performed by a single company. Not only that, but the company can also supply its own inputs.

Is such an operation a farm or some other kind of business—or does that sort of distinction make sense anymore? It's just one of a welter of questions raised by the developments of recent years.

Solving these conundrums for policymakers may well be the hardest task facing agricultural economists in the time ahead. Their job in the policy arena is much the same as it was 50 years ago: to provide information, explanations, and suggestions. But it has never been a more complicated assignment than it is now. (8)

[Fourth in a series.]

Consumers the world over are apparently swarming for honey. Like so many other "natural" foods, this old-time favorite is experiencing a surge in popularity . . . but supplies aren't keeping up.

When students returned to one Midwestern college last fall, they found that the familiar honey jars in the dining room were gone.

Around the same time, honey—a flavoring in tobacco products—was also a subject of conversation at an international tobacco conference.

The reason? The demand for honey is on the increase . . . and production is not. As a result, honey prices have recently gone up sharply.

Last year, honey prices for U.S. producers were the highest they've been since 1947. At 31¢ per pound, they were 44 percent higher than a year earlier. Total value of the crop in 1972 was \$67 million.

Meanwhile, the number of bee colonies has been trending down since the late 1940's. Last year, there were slightly more than 4 million colonies of bees compared with 4.7 million in 1965.

U.S. honey production last year totaled 215 million pounds, compared with 242 million pounds in 1965.

The waxing demand for honey is related to increased demand for "natural" foods generally, both in this country and abroad.

USDA's Foreign Agricultural Service reports that in the past decade, major countries importing honey have stepped up imports by 45 percent. World production, however, has increased by only about 9 percent.

Thus, honey prices on the world market climbed steeply throughout 1972, reflecting the expanded demand.

West Germany continued to be the largest importer in the comparison of net imports for 1960-64 and 1969-71.

But the big news was that Japan

and the United Kingdom, rather than West Germany, were the major recipients of the 65.7 million more pounds of honey imported in major countries from 1960-64 to 1969-71.

Japan accounted for nearly 45 percent of the increase, the United Kingdom, for 22 percent, and the U.S., for 13 percent. West Germany accounted for but 10 percent of the

increase in imports over the decade.

During this period, the U.S. changed from a net exporter of honey to a net importer. In 1960-64, the U.S. averaged yearly net sales of more than 5.6 million pounds. During 1969-71, net purchases averaged 3.1 million pounds.

Then, in 1972, gross U.S. imports of honey hit 39 million pounds, surpassing a record set in the early

HITTING THE HONEY JAR



1940's. Net imports totaled nearly 35 million pounds.

The world's largest exporting countries are Mexico, Mainland China, Argentina, Canada, and Australia. However, production in these countries has not as yet responded to world demand, indicating prices will continue to be high.

Commercial apiaries—those with 300 or more colonies of bees—accounted for about 55 percent of U.S. production last year. They had 1.6 million colonies producing 118 million pounds of honey, with a yield of 73 pounds per colony. Overall, yield per colony in the U.S. last year averaged less than 53 pounds.

California and Florida led all States in production. California's 500,000 colonies produced 24.5 million pounds of honey, especially from blossoms of alfalfa, wildflowers, and some citrus. Florida's 350,000 colonies, depending mainly on citrus blossoms, produced 26.6 million pounds of honey.

Other leading producers were South Dakota, Minnesota, and Texas.

Total honey production in the U.S. was up 9 percent over 1971, although it was 14 percent below the production for 1962.

It has gone down over the years partly because low prices have driven a number of beekeepers out of business.

However, the recent surge in demand won't necessarily result in as sudden an increase in supply.

The major factor in honey production—almost an all-controlling one—is the weather. Bees gather nectar to make honey. And there are a number of weather conditions under which nectar flow is restricted—particularly when it is cool and wet.

Last year, weather was generally more favorable than in 1971, especially in North and South Dakota. Late summer rains brought on sunflowers and other late blossoms and made possible an excellent crop.

The use of pesticides has also affected honey production in the U.S. Over the past 6 years, USDA has paid out \$6.5 million to beekeepers for production losses due to pesticides under the Beekeepers Indemnity Program.

Another factor is the lack of floral sources in the U.S. Beekeepers say they have nowhere to place new apiary sites. Only so many hives can be put in a certain location for efficient production.

Many beekeepers do earn additional income from leasing their colonies to farmers for the pollination of crops.

About 3 million acres of crops valued at \$1 billion annually, are dependent on insects—primarily honeybees—for pollination. These include many of our fruits, vegetables, and legumes.

In addition, beekeepers earned \$2.5 million last year from 4 million pounds of beeswax. (9)

New Record Forecast For Beef Consumption

Beef is more in demand than ever before—and the trend is likely to continue through 1973.

Beef is expected to account for all of the increase in red meat consumption forecast for this year. Consumption is projected to rise 2 to 3 pounds over the record 115.9 pounds per person consumed in 1972.

Though modest gains are in store for U.S. beef output, more of the beef we buy will come from abroad. Restrictions on import quotas have been lifted this year.

Pork consumption, which fell off 6 pounds per person in 1972, is expected to hold fairly steady at around 67 pounds. Pork producers are getting higher prices for their hogs, so the incentive to breed more sows is strong.

In the case of veal, consumption has been declining for several years, and another reduction is in sight for '73, bringing per capita consumption below the 2.2 pound level.

Though lamb and mutton reversed a trend and rose slightly in 1972—to 3.3 pounds per person—usage is likely to drop again this year, due to smaller flocks and shrinking imports.

Beef prices may rise this spring as gains in beef output are offset by smaller pork supplies and increases in consumer income. Pork prices are forecast to hold steady, with veal and lamb going up. (10)

HONEY'S MAJOR IMPORTERS . . . AND HOW THEY GREW

| | Net imports | | Increase in net imports | |
|----------------|----------------------|--------------------|-------------------------|---------------------|
| | 1960-64 average | 1969-71 average | Quantity | Percent of Total |
| | <i>1,000 pounds</i> | | | |
| United States | (5,628) ¹ | 3,132 | 8,760 | 13.3 |
| Austria | 6,230 | 6,380 | 150 | .2 |
| Belgium | 4,098 | 4,973 | 875 | 1.3 |
| Denmark | 1,469 | 2,854 | 1,385 | 2.1 |
| France | 7,681 | 7,991 | 310 | .5 |
| West Germany | 91,094 | 97,813 | 6,719 | 10.2 |
| Italy | 2,349 | 2,653 | 304 | .5 |
| Netherlands | 4,865 | 5,600 | 735 | 1.1 |
| Sweden | 680 | 1,307 | 627 | 1.0 |
| Switzerland | 7,081 | 7,901 | 820 | 1.2 |
| United Kingdom | 23,993 | 38,663 | 14,670 | 22.3 |
| Hong Kong | 492 | 1,322 | 830 | 1.3 |
| Japan | 1,723 | 31,273 | 29,540 | 44.9 |
| Total | 146,137 | 211,862 | 65,725 | 100.0 |

¹ Net exports.

Cut Flower Industry Migrates West and South

The cut flower industry is picking up roots and moving to areas with natural sunshine and clearer climates.

Today the largest share of the Nation's cut flowers is grown in California, Florida, Colorado, North Carolina, and other States with climates and other conditions more suited to flower production than the controlled environment of greenhouses.

Moving mostly west and south over the past 2 decades have been the top five leading varieties of the cut flower industry. They include carnations, pompon chrysanthemums, standard chrysanthemums, gladioli, and roses.

One example of the migration is the pompon chrysanthemum industry. In 1949 California and Florida together had only 14 percent of the domestic output in commercial States reported, but by the early 1970's their share had risen to over 70 percent.

While the five leading States produced half our carnations in 1949, their output had risen to 90 percent by 1970. Massachusetts, once the leading producer, was eclipsed by California and Colorado.

Though California has continued to lead in the production of roses over the past 20 years, the output of Pennsylvania and New York has wilted in favor of Indiana and Massachusetts. During the same period standard chrysanthemums grew rapidly in Florida and North Carolina.

A USDA study found that in 1968-1970 roses were favored over all other cut flowers bought by the U.S. consumer. This despite a two-thirds increase in the wholesale price of roses during the past 2 decades.

The number of gladiolus growers has been on the wane as has production over the past 5 years. But Florida continues to outpace California in spike production.

While many of the centers of

flower population were shifting within the U.S., an increasing volume of flowers—especially carnations, pompon chrysanthemums, and standard chrysanthemums—were entering the country from Latin America.

The 11 million standard chrysanthemums imported in 1971 represented 8 percent of U.S. production in the 23 commercial States; the 1.9 million bunches of pompon chrysanthemums, 6 percent; and the 33 million carnation blooms, over 5 percent.

The Latin American countries selling us cut flowers include Colombia, Costa Rica, Guatemala, Ecuador, and Mexico. (12)

New Twist To Manmade Fibers

The group of manmade fibers known as noncellulosics—chiefly nylon, polyester, and acrylics—has been growing in popularity in recent years. According to a new ERS study, much of the gain has come in nonapparel uses like tire cord and carpets and rugs.

The report, a joint effort by ERS and the University of California at

Davis, shows that the total fiber market will increase more than two-fifths during the 1970's.

Rayon and acetate, two synthetics made from cellulose, are projected to hold a market share of 12 percent, with cotton at 23 percent and wool at 1 percent. Noncellulosics will make up the balance, with 64 percent.

Noncellulosics, which have been competing fiercely with cotton, are relatively recent additions to the manmade fiber market.

The earliest manmade fibers—rayon and acetate—were a form of cellulose originating in wood fibers or very short cotton fibers. Nylon, the first wholly synthetic fiber, was introduced in 1939, followed by polyester 2 years later and acrylics in 1948.

Since then, the noncellulosics have been making rapid gains.

In 1966, noncellulosics had 26 percent of the textile market (excluding imports); rayon and acetate, 18 percent; cotton, 50 percent; and wool, 6 percent. Five years later, noncellulosics, having displaced both rayon and acetate as well as natural fibers in many end-use markets, accounted for 46 percent of all fiber use.

Two factors account for much of this growth. First, prices for noncellulosic staple fiber declined from more than three times the price of cotton and other synthetics to a level which made them directly price competitive. Secondly, the manmade fiber industry has expended large sums on research and promotion, which helped noncellulosics move into many markets.

In the 1970's, ERS cotton experts say it seems unlikely that manmade fiber prices will fall as much as in the 1960's. Also, the cotton industry is countering with its own research and promotion campaign aimed at expanding cotton markets.

From 1970 to 1980, the study predicts that noncellulosics will continue to grow. Of interest to cotton producers, however, is an estimate that cotton use will increase one-tenth—this would put mill consumption in 1980 near 9 million bales. (13)

Cutting Down on Sweets

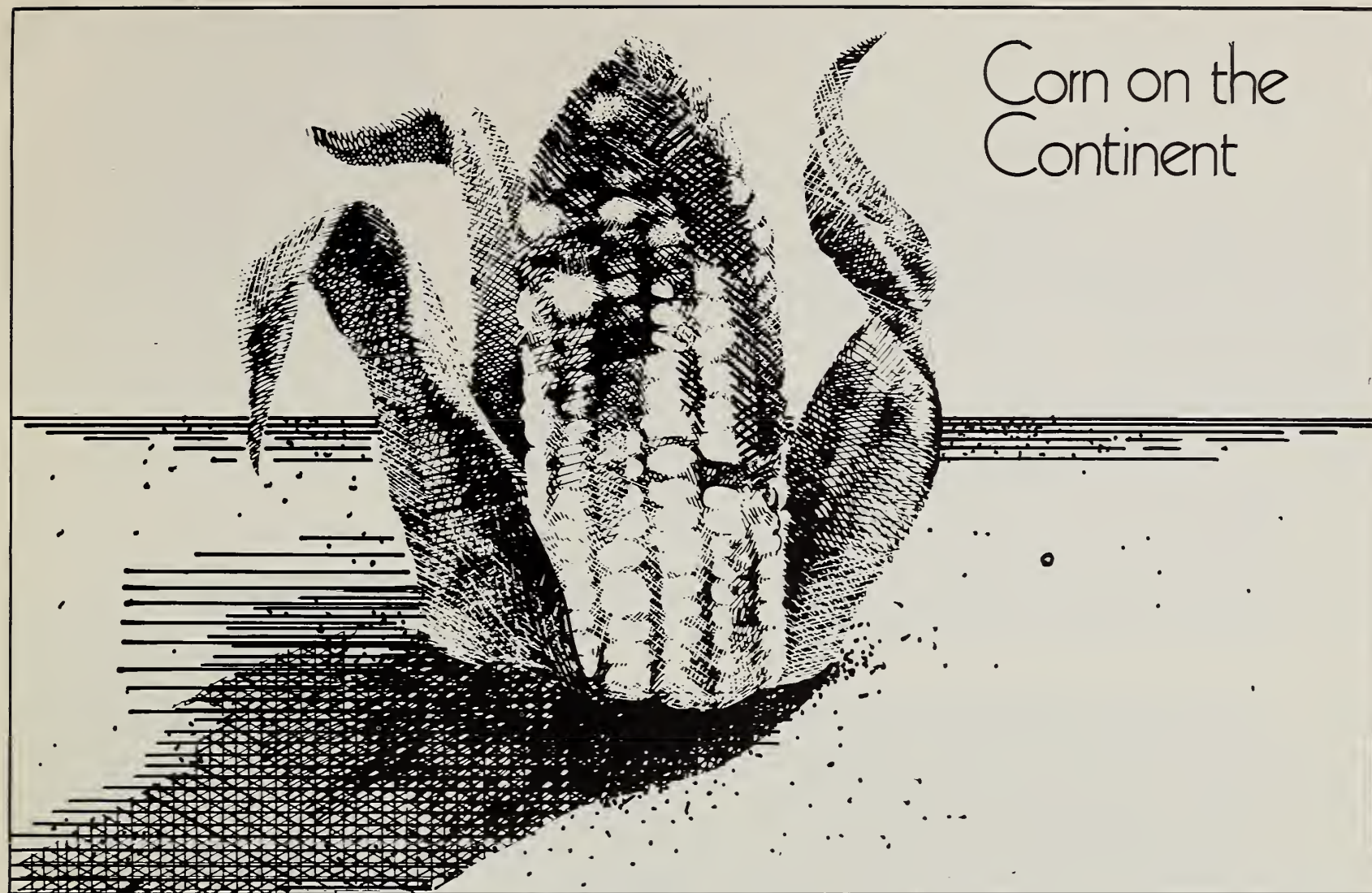
Weight-conscious Americans are shunning the sweetpotato.

Thirty years ago, everybody ate 21 pounds of sweetpotatoes on the average. Last year's consumption was down to less than 5 pounds per person, and by some forecasts, usage will ebb to 3 pounds by 1980.

Over the years, farmers have made steady cutbacks in acreage and production to accommodate a shrinking market. But the 1972 sweetpotato crop of 12.4 million hundredweight was 6 percent larger than in 1971, though it was one of the smallest crops on record and less than half the size of the 1950 crop.

Even with this larger crop, you may continue to pay more for sweets this year, particularly for canned items. Current supplies of canned sweetpotatoes are smaller than a year earlier, because a larger 1972 pack did not affect the depleted stocks. (11)

Corn on the Continent



Led by France and Spain, West Europe will more than double its corn output over the seventies, an accomplishment that augurs poorly for world corn exporters.

Corn production is rising in Western Europe — foretelling a dropoff in imports from the U.S. and other world suppliers. In 1972, U.S. corn sales to Western Europe totaled 12 million metric tons valued at \$606 million.

Right now, West Europe is the world's largest market for corn, absorbing 65-70 percent of world exports. But a recent surge in domestic output raises this question: will West Europe's future corn needs be filled largely by its own farmers or by imports?

As experts see it, continental corn production will more than double over the decade to 33.4 million tons in 1980.

Domestic consumption will grow

by about half in the same period to an estimated 45 million tons. The implied West European net import requirement is 11.6 million tons of corn by 1980, compared with a 13.3 million ton average in 1969/70-71/72.

Over the past few years, the U.S. has supplied roughly 60 percent of West Europe's net corn imports, or about 8 million tons. Assuming the U.S. maintains this market share, Western Europe's imports of U.S. corn could dip to 7 million tons by decade's end.

Each nation's progress. A closer look at developments in individual countries reveals how this situation is shaping up...

FRANCE, together with Italy and Spain, accounts for about 85 percent of West European corn output. But France is far and away the No. 1 producer, and the only country self-sufficient in corn production.

Until 1962, France was a net im-

porter of corn, though it began exporting sizable amounts in 1960. More than half of all French corn exports go to other partners in the European Community.

French farmers began expanding corn area after adoption of unified EC grain prices in 1967. Corn area mushroomed to 1.9 million hectares last year (1 hectare = 2.5 acres), nearly double the 1967 level.

Since unification, EC target prices for corn have been raised several times, providing farmers added incentive to accelerate production. Further price advances this decade, however, are assumed to be slight.

Dramatic growth in French corn production—from less than 4 million tons in 1965-67 to 8.8 million last year—reflects more than just favorable EC prices. Rapid adoption of improved hybrid seed varieties played a major role.

In 1971, 98 percent of France's

corn area was planted to hybrids, compared with about 50 percent in the early 1960's. At the same time, French farmers sharply stepped up use of machinery, fertilizer, herbicides, and pesticides.

Even larger corn crops expected during the seventies will be spurred by rising corn demand—mainly for livestock feed—both in France and in neighboring countries. Continued growth in French farm size also augurs well for corn, which becomes more profitable relative to other crops when farm size increases.

Threefold growth. Experts predict that production in 1980 could approach 19 million tons—almost three times the 1969-71 level. Corn area is expected to nearly double to 2.8 million hectares, largely at the expense of oats, rye, and root crops such as potatoes and fodder beets. Also, some fallow land will be shifted to corn production. Yields, meantime, are projected to rise more than a third.

ITALY's corn production topped 4 million tons for the first time in 1969. Output has since stayed well over that mark, with the 1972 crop estimated at 5 million tons.

The upswing is largely due to adoption of EC grain prices, which hastened the shift from local "nostrano" varieties to better-yielding hybrids. Insignificant in postwar Italy, area planted to hybrids now accounts for about four-fifths of total corn land.

There are several major barriers to further corn expansion in Italy, but shortage of water looms largest. In 1970, less than a fifth of agricultural land was equipped for irrigation, with only slight advances expected this decade.

The size barrier. Small fragmented farms continue to slow introduction of new production technology and labor-saving machines. Though farm size in 1970 averaged 7 hectares, more than four-fifths of all farms occupied fewer than 4 hectares. Too, fertilizer and machinery use rank lowest in the EC.

In short, growth in Italian corn

production this decade will probably be modest due to the:

✓ continued decline in arable land and stiffening competition from other crops, particularly fruits and vegetables;

✓ limited availability of new irrigated land; and

✓ mounting competition from corn grown for silage, as Italian farm policy continues to stress livestock production.

Water's a must. Total production by 1980 is projected at 5.9 million tons—up from 4.6 million in 1969-71. Average corn yields will rise, but gains will taper off as the switch from nostrano to hybrid varieties nears completion.

In SPAIN, corn has only recently emerged as an important crop. Output in 1972 reached 2.2 million tons—90 percent above the 1965-67 level.

Since 1964, the Spanish government has launched several programs to boost corn production and ease wheat surpluses. In response, corn area has increased at an annual rate of 11,000 hectares.

Accelerated production is also explained by higher yields—the result of more intensive use of hybrids, fertilizers, and irrigation.

As in Italy, lack of water and small farm size have posed major roadblocks to corn production. Spain's total irrigated area, however, is expanding rapidly, largely through government-sponsored projects. Future expansion of irrigated corn area—projected at 480,000 hectares in 1980—will come largely from newly developed irrigated areas and from irrigated land now producing wheat, rice, cotton, and potatoes.

Meantime, fertilizer applications are up sharply—prodded by government programs that supply low-cost fertilizers for certain crops. Use of hybrids has also advanced steadily, now accounting for more than 60 percent of total corn area.

Spain shows good corn-producing potential. Estimates put 1980 output at 3.8 million tons, more than double the 1969-71 average. And yields are

expected to swell from 35 to 52 quintals per hectare. (1 quintal = 220.4 lbs.)

Other West European countries—Austria, West Germany, Portugal, Greece, Switzerland, Belgium, the Netherlands, and the United Kingdom—now produce about a seventh of the Continent's corn.

GREECE's corn area has been trending up in recent years, and output during 1969-71 averaged 515,000 tons—up 80 percent from the mid-sixties. Yields grew at an annual rate of 12 percent.

PORTUGAL's output has remained fairly stable due to increased yields, despite declining corn area during the sixties. Even so, Portuguese corn yields are the lowest in West Europe, partly because farmers interplant corn area with beans and corn for forage. Also, only one-tenth of total corn area is planted with higher-yielding hybrids.

In 1970, the Portuguese government announced a new grain policy raising the corn support price from \$80 to \$95 per ton.

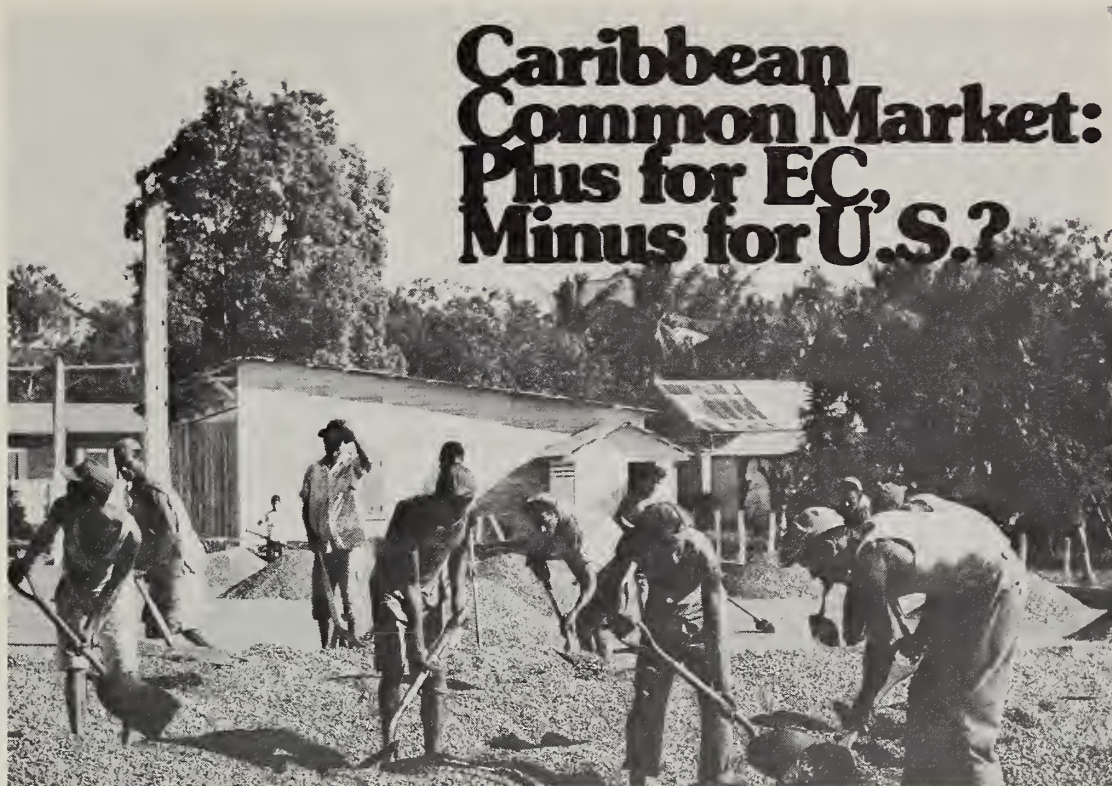
AUSTRIA's corn yields, in contrast to Portugal's, have tended to be the highest in West Europe. Yields have nearly doubled since the mid-1950's due to improved hybrid varieties and better cultivation techniques.

Austrian corn area also more than doubled from 1967 to 1971, as farmers responded to higher corn prices relative to wheat and development of corn varieties with a shorter growing season. Traditionally a large net importer of corn, Austria now borders on self-sufficiency.

WEST GERMANY's corn production was relatively unimportant in the 1950's. By 1972, production had increased to nearly 600,000 tons as favorable EC prices led to rapid expansion of corn area. Larger corn area also explains rising output in SWITZERLAND. But productive farmland is relatively limited and Swiss corn crops will grow only modestly through the end of the decade. (14).



Top Caribbean exports that the CCM is anxious to protect are, clockwise from bottom left, sugar (here, cane is moved into a sugar mill), bananas, coffee, and coconuts.



Enlargement of the European Community (EC) is affecting more than just U.S. trade with Western Europe.

Preferential arrangements negotiated by the new nine-member Community with other areas of the world will influence the U.S. farm trade picture outside of Europe, too.

A case in point is the Caribbean.

On May 1, the Caribbean Common Market (CCM) will take effect between the 12 Commonwealth countries that are now members of the Caribbean Free Trade Association (CARIFTA). A chief aim of the new union is to allow member countries to speak with a single—and therefore stronger—voice in negotiating for preferential access to the enlarged EC market.

Such negotiations, which could

lead to reverse preferences to the EC by the CCM, could be potentially damaging to many commodities we export to the islands.

Proportionally, the Caribbean countries do not take a large share of U.S. exports. In fiscal 1972, we exported \$72.5 million worth of farm products to CARIFTA—less than 1 percent of the U.S. farm export total.

But we do export certain commodities in quantity. In fiscal 1972, CARIFTA took \$27.3 million worth of our grains and preparations; \$18.6 million worth of animals and animal products; and \$11.3 million worth of meat and meat products.

When it comes to the Caribbean's exports, sugar is the most important. CARIFTA sells sugar to its chief market—Britain—at prices considerably higher than the world market

price. CARIFTA is anxious to continue these preferential prices with the entire EC, now that Britain is inside, but the EC, excluding Britain, is a surplus sugar producer.

It is here that harm to U.S. exports could result. In return for continued preferences for sugar as well as preferences for other Caribbean products like bananas, citrus fruits, and coconut products, the EC is expected to request preferred markets in the Caribbean for their own products. These would be competitive with leading U.S. farm exports to the group.

The EC now has give-and-take trade arrangements like this with a wide range of countries elsewhere in Europe and in Africa. With Britain in the Community, it is not only the Caribbean but other Commonwealth

countries that will be seeking to extend the favored treatment of their products by the U.K. to the entire EC—in exchange for certain reciprocal concessions.

What those concessions are is something USDA trade specialists will be keeping a close watch on in the upcoming round of EC talks in Brussels. (16)

Global Agricultural Output Dipped Slightly in 1972

World agricultural production dropped a notch in 1972, with much of the blame put to bad weather.

Statistics compiled by ERS show 1972 world output (excluding Communist Asia) fell about 1 percent from the high level of 1971. Reduced harvests of grains in 1972 were

largely responsible for the drop, offset in part by larger harvests of cotton and soybeans. Tobacco was unchanged. Red meat and poultry production continued uphill, as did milk output in most of the important dairy countries.

Total world grain production in 1972 dipped somewhat to 1.07 billion metric tons but was still the second largest on record. Wheat, feed grains, and rice all registered declines.

Main developments affecting the world grain situation last year were—

✓ adverse weather in several major producing countries;

✓ massive grain purchases by the USSR necessitated by a short wheat crop;

✓ a drawdown in world wheat stocks;

✓ low rice supplies in Asia;

✓ uncertainty about grain supplies in India and the People's Republic of China.

Cotton production, boosted by larger acreage and better yields, rose to 59 million bales. Almost all the increase was in the U.S.

Tobacco production was about the same as in the previous 2 years, around 10 billion pounds. Soybean production—up for the 8th straight year—advanced to 48 million tons, but output of most other major oilseeds decreased.

Beef and veal production climbed from 1971's 75 billion pounds (1972 figures are not yet available) and pork was up from 1971's 57 billion. World cattle numbers reached a new high of 1.23 billion in 1972; hog numbers rose to a record 634 million; and sheep numbers dropped to slightly over 1 billion. (15)

Article Sources

Readers are invited to write for the complete reports, studies, speeches, or papers on which we base our articles. Authors and titles are listed below, preceded by numbers corresponding to those appearing at the end of stories in this issue. Those publications indicated by (*) are obtainable only from the university or experiment station cited. The word "manuscript" after an item denotes a forthcoming publication, which we will send you when it comes off press. "Special material" after an item means the article was researched specially for this magazine, although additional information is generally available. Address all inquiries to The Farm Index, Office of Management Services, U.S. Department of Agriculture, Room 1459, Wash., D.C. 20250.

1. Robert F. Boxley, Gene Wunderlich, Dudley Mattson, Norman Landgren, and John W. Putman, NRED. Report on Land and Water Resources (manuscript).
2. Harold H. Ellis, NRED. Report on Land and Water Resources (manuscript).
3. Sergio Sepulveda, University of Washington, and Ralph A. Loomis, EDD. A Profile of Spanish-speaking Migrants in an Urban Center—Seattle, Washington (manuscript).
4. Velmar W. Davis, FPED. "Environmental Controls and Economics—Outlook for U.S. Agriculture" (speech at Southern Regional Outlook Workshop, Atlanta, Ga., Oct. 2-4, 1972).
5. W. Fred Woods, FPED. "The Value Added Tax and American Agriculture" (special material); and Jerome M. Stam and Thomas F. Hady, EDD. "Alternatives to the Property Tax for Educational Finance" (paper to Seminar on the Crisis in Public School Finance, Lincoln, Neb., April 12, 1972).
7. Carson D. Evans, FPED. *1973 Agricultural Finance Outlook*, AFO-12, February 1973.
8. David E. Brewster, agricultural historian, ESAD (Special material).
9. Frederick D. Gray, ESAD, Harry A. Sullivan, Agricultural Stabilization and Conservation Service, John C. Hobbes, Foreign Agricultural Service (special material); "Honey Production, 1972 Annual Summary," Statistical Reporting Service, Hny (1-73); and Foreign Agriculture Circular, Honey, FHON 1-72, December 1972.

10. Don Seaborg, ESAD. *Livestock and Meat Situation*, LMS-189, February 1973.
11. Charles W. Porter, ESAD (special material) and *Vegetable Situation*, TVS-187, February 1973.
12. Jules Powell, MED (special material).
13. Lionel E. Ward and Gordon A. King, Department of Agricultural Economics, University of California at Davis. "Interfiber Competition with Emphasis on Cotton" (manuscript).
14. William P. Roenigk, James E. Lopes, and Donald M. Phillips, FDCE. Growth Potential of Corn Production in Western Europe Through 1975 and 1980 (manuscript).
15. Richard McArdle and Henry Trainor, FDCE. *World Agricultural Situation*, WAS-3, December 1972.
16. Frank D. Barlow, FDCE (special material).

NOTE: Unless otherwise indicated, authors are on the staff of the Economic Research Services (ERS) with their divisions designated as follows: Economic and Statistical Analysis Division (ESAD); Economic Development Division (EDD); Farm Production Economics Division (FPED); Foreign Demand and Competition Division (FDCE); Foreign Development Division (FDD); Marketing Economics Division (MED); and Natural Resource Economics Division (NRED).

Recent Publications

Economic and Operational Characteristics of Livestock Ranches—Rio Grande Plains and Trans-Pecos of Texas. C. C. Boykin, Farm Production Economics Division; N. K. Forrest and John Adams, Texas Agricultural Experiment Station. MP-1055, October 1972.*

The objectives of this study are to identify homogeneous livestock ranching areas; to determine the most common ranch resource situations within each ranching area in terms of acreage operated, land use and livestock system; to determine the amount of investment, management practices, costs and returns among the representative ranches; and to identify factors associated with differences in ranch returns.

Cost of Operating Trucks for Livestock Transportation. Patrick P. Boles, Marketing Economics Division. MRR 982.

This report uses synthetic cost analysis to develop cost per mile of operating a livestock truck for trips of different constant lengths and for specific mixture of trip lengths. The effect of four variables—seasonality of livestock movement, constraints on the number of daily trips, level of backhaul, and level of utilization of revenue equipment—on cost per vehicle mile is shown.

Milk Sales in Foodstores: Pricing and Other Merchandising Practices. W. Webster Jones, Marketing Economics Division. MRR 983.

This study examines some of the more important merchandising practices used by retail foodstores to sell milk. The main focus is on the pricing structure for milk and the kinds and relative importance of different brands of milk sold.

Caustic Dry Peeling of Cling Peaches To Reduce Water Pollution: Its Economic Feasibility. Leo Gray, Marketing Economics Division, and Marcus R. Hart, Agricultural Research Service, Albany, California. AER 234.

This report presents an economic analysis of alternate methods of peeling cling peaches and indicates the potential impact of a new processing technique designed to facilitate pollution abatement of cannery waterways. The simulated plant data used in this report are presented as a model rather than as being representative of the industry.

Single copies of the publications listed here are available free from The Farm Index, Office of Management Services, U.S. Department of Agriculture, Washington, D.C. 20250. However, publications indicated by () may be obtained only by writing to the experiment station or university. For addresses, see the July and December issues of The Farm Index.*

Public Investments and Population Changes in Three Rural Washington State Towns. Nelson L. Bills, Economic Development Division, and Paul W. Barkley, Professor of Agricultural Economics, Washington State University. AER 236.

This study analyzes public investments made by three predominantly rural towns in the State of Washington. The towns are Kent (a growing town), Roslyn (a declining town), and Dayton (a stable town). The study is limited to analysis of capital expenditures made by the municipalities and the local school districts. Specific objectives were to describe and analyze the pattern, magnitude, and source of funds for capital expenditures by the three towns.

Agriculture in the Upper Great Lakes Region, 1949–69. Melvin R. Janssen, Economic Development Division. Stat. Bull. No. 506.

This report is a statistical summary of data from the Census of

Agriculture, for the years 1949–69, for the counties in the Upper Great Lakes Regional Commission Area. Data include number of farms, total acreage, cropland acreage, value of farm products sold, and number of farms by economic class.

Agricultural Production and Trade of Colombia. Gae A. Bennett, Foreign Demand and Competition Division. ERS-For. 345.

This study contains general background material on Colombia's physical resources—topography, climate, soils, forests, and minerals. It analyzes the factors influencing demand for agricultural products; reviews general policies and goals toward agricultural production and trade; and examines production practices and transportation and marketing facilities.

Stocks of Grain, Oilseed, and Hay: Revised Estimates By States, 1964–70; Farm and Off-Farm Stocks. Statistical Reporting Service. Stat. Bull. 508.

Estimates of farm, off-farm, and total stocks of corn, all wheat, durum wheat, oats, barley, rye, flaxseed, soybeans, and sorghum grain and of farm stocks of hay have been revised in conformance with revised production estimates for the crop seasons 1964 through 1970. All stocks data are obtained on position basis, without regard to ownership.

Agricultural Development and Farm Employment in India. William J. Staub, formerly Foreign Development and Trade Division. FAER 84.

Objectives of the study include identifying variables which significantly influence the amount of family and hired labor employed per farm, and determining whether differences exist within districts as well as between them in the way variations in farm input use affect the amount of family and hired labor employed.

(Continued from page 3)

With increases in production expenses outracing gains in production receipts, this year's realized net income for farmers may be a bit less than \$19 billion, a few hundred million shy of 1972's record.

Exports of U.S. farm products are well on their way to establishing an alltime high in fiscal 1973. The present outlook is for an export total of just over \$11 billion, up from the previous record of \$8.1 billion set in fiscal 1972.

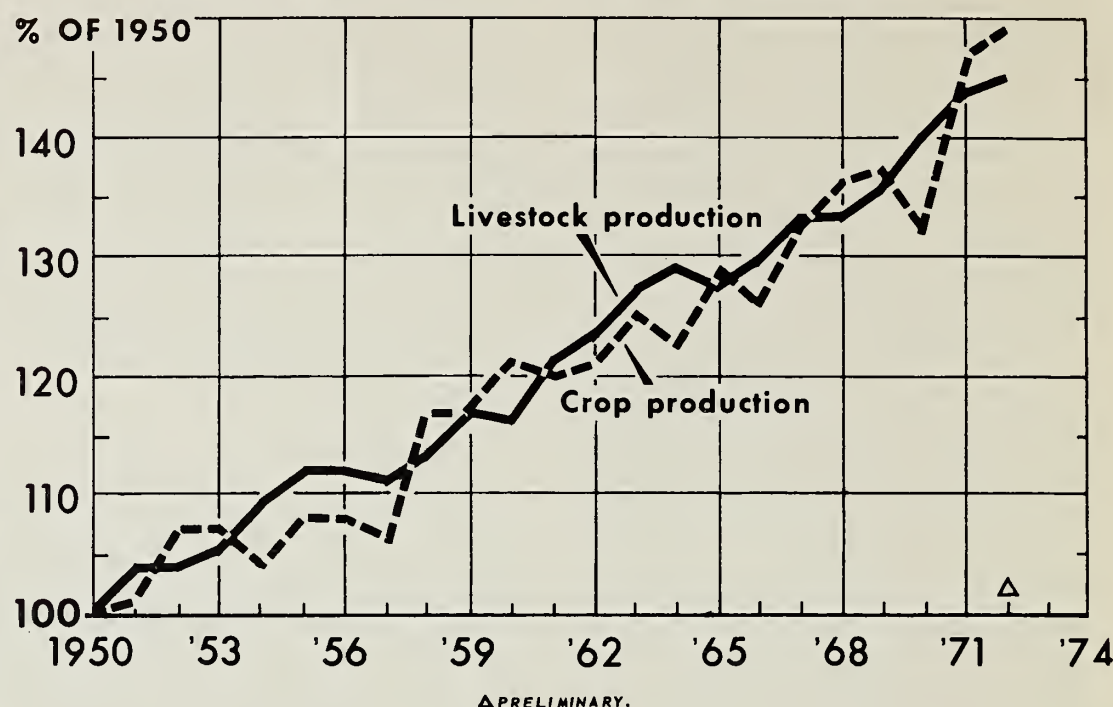
The sharp growth in exports will mainly reflect stepped-up shipments of grains and soybeans. Exports of these commodities are expected to be of record proportions, mainly reflecting the huge purchases by the Soviet Union. Sizable increases are anticipated in exports of grains and soybeans to other destinations as well.

Turning to the consumer, he can expect to pay higher food prices than a year ago. Retail prices are projected to average around 6 percent above 1972, mainly due to a sharp boost in January-March. Some easing seems likely in April-June, with only gradual increases the rest of the year.

Steeper prices, along with greater consumption, may lift total food spending by 7½ percent from 1972.

Food consumption on a per capita basis is expected to reach a new high in 1973, with all the increase in the second half of the year. Greater consumption is in store for red meats, poultry, fish, dairy products, vegetable oil, fruit, and processed vegetables.

CROP AND LIVESTOCK PRODUCTION



Reductions are likely for eggs, animal fats, fresh vegetables and potatoes, coffee, and cocoa.

In 1974? Crop production will probably expand further, especially grains and soybeans . . . hog production will be on the up cycle . . . fed cattle marketings will continue to swell.

The cattle inventory has been rising for several years and the buildup seems to be gaining momentum. Almost all the increase has been in beef cows and calves.

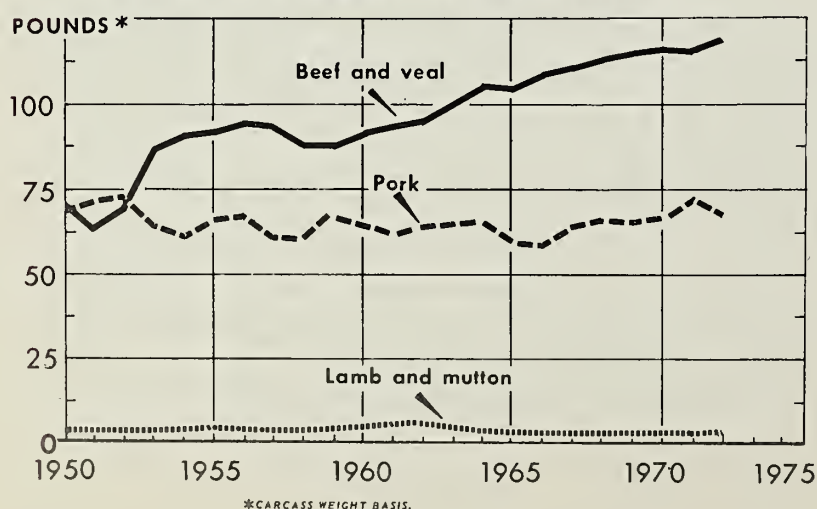
Prospects for exports in '74 are hard to predict. Though export demand will stay strong for soybeans, future export demand for grains is uncertain for various reasons. Should grain exports

drop sharply, this could set the stage for a decline in U.S. grain prices.

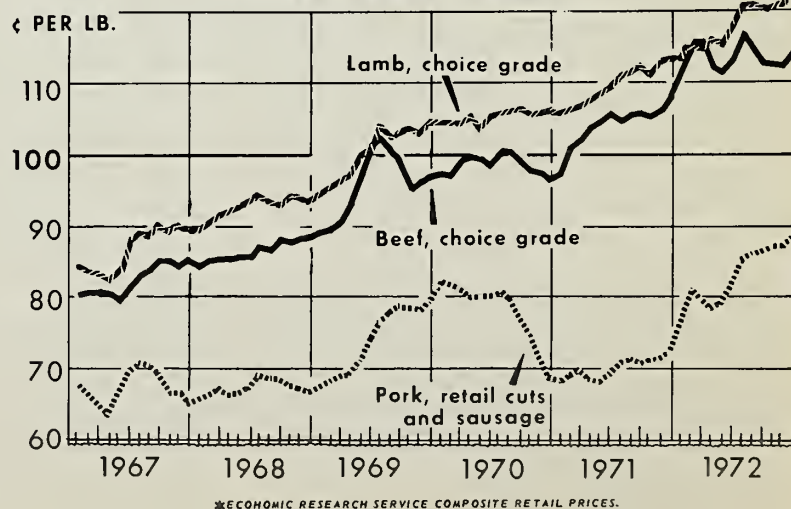
Overall, the prognosis is for farm prices and incomes to continue on the high side at least through part of 1974. But meat animal prices are expected to be turning down in the second half of this year and into 1974. This raises the possibility of a break in farm prices and incomes next year.

Beyond 1974, ERS analysts foresee rising supplies and some weakening in exports. The result could be lower prices and lower net farm incomes than what's expected in 1973. Still, both prices and incomes would stack up favorably with those of recent years, with the exceptions of 1972 and 1973.

MEAT CONSUMPTION PER PERSON



RETAIL MEAT PRICES*



Economic Trends

| Item | Unit or Base Period | 1967 | 1971 Year | Dec. | Oct. | 1972 Nov. | Dec. |
|---|------------------------|--------------------|--------------------|---------|-------------------|-------------------|--------------------|
| Prices: | | | | | | | |
| Prices received by farmers | 1967=100 | — | 112 | 116 | 129 | 130 | 137 |
| Crops | 1967=100 | — | 107 | 108 | 116 | 120 | 127 |
| Livestock and products | 1967=100 | — | 116 | 122 | 138 | 138 | 145 |
| Prices paid, interest, taxes and wage rates | 1967=100 | — | 120 | 122 | 129 | 130 | 131 |
| Family living items | 1967=100 | — | 119 | 121 | 125 | 127 | 127 |
| Production items | 1967=100 | — | 115 | 117 | 125 | 126 | 129 |
| Ratio ¹ | 1967=100 | — | 94 | 95 | 100 | 100 | 105 |
| Wholesale prices, all commodities | 1967=100 | — | 113.9 | 115.4 | 120.0 | 120.7 | 122.9 |
| Industrial commodities | 1967=100 | — | 114.0 | 115.3 | 118.8 | 119.1 | 119.4 |
| Farm products | 1967=100 | — | 112.9 | 115.8 | 125.5 | 128.8 | 137.5 |
| Processed foods and feeds | 1967=100 | — | 114.3 | 115.9 | 121.8 | 123.1 | 129.4 |
| Consumer price index, all items | 1967=100 | — | 121.3 | 123.1 | 126.6 | 126.9 | 127.3 |
| Food | 1967=100 | — | 118.4 | 120.3 | 124.9 | 125.4 | 126.0 |
| Farm Food Market Basket: ² | | | | | | | |
| Retail cost | 1967=100 | — | 115.7 | 117.9 | 122.5 | 123.1 | 123.8 |
| Farm value | 1967=100 | — | 114.4 | 117.4 | 125.0 | 126.0 | 131.4 |
| Farm-retail spread | 1967=100 | — | 116.5 | 118.2 | 120.9 | 121.3 | 119.0 |
| Farmers' share of retail cost | Percent | — | 38 | 39 | 40 | 40 | 41 |
| Farm Income: ³ | | | | | | | |
| Volume of farm marketings | 1967 | 100 | 111 | 131 | 162 | 158 | 126 |
| Cash receipts from farm marketings | Million dollars | 42,693 | 53,063 | 5,157 | 7,200 | 6,937 | 5,700 |
| Crops | Million dollars | 18,434 | 22,609 | 2,598 | 3,815 | 3,941 | 2,900 |
| Livestock and products | Million dollars | 24,259 | 30,454 | 2,559 | 3,385 | 2,996 | 2,800 |
| Realized gross income ⁴ | Billion dollars | 49.0 | 60.1 | 61.8 | — | — | 70.6 |
| Farm production expenses ⁴ | Billion dollars | 34.8 | 44.0 | 44.9 | — | — | 49.4 |
| Realized net income ⁴ | Billion dollars | 14.2 | 16.1 | 16.9 | — | — | 21.2 |
| Agricultural Trade: | | | | | | | |
| Agricultural exports | Million dollars | — | 7,695 | 842 | 908 | 1,080 | 1,110 |
| Agricultural imports | Million dollars | — | 5,825 | 540 | 574 | 547 | 550 |
| Land Values: | | | | | | | |
| Average value per acre | Dollars | ⁶ 168 | ⁷ 201 | — | — | — | ⁸ 217 |
| Total value of farm real estate | Billion dollars | ⁶ 181.8 | ⁷ 213.0 | — | — | — | ⁸ 228.6 |
| Gross National Product: ⁴ | | | | | | | |
| Consumption | Billion dollars | 793.9 | 1,050.4 | 1,078.1 | — | — | 1,195.8 |
| Investment | Billion dollars | 492.1 | 664.9 | 680.5 | — | — | 746.2 |
| Government expenditures | Billion dollars | 116.6 | 152.0 | 158.8 | — | — | 192.4 |
| Net exports | Billion dollars | 180.1 | 232.8 | 240.9 | — | — | 260.3 |
| | Billion dollars | 5.2 | .7 | —2.1 | — | — | —3.0 |
| Income and Spending: ⁵ | | | | | | | |
| Personal income, annual rate | Billion dollars | 629.3 | 861.4 | 890.4 | 963.8 | 975.7 | 983.4 |
| Total retail sales, monthly rate | Million dollars | 26,151 | 34,071 | 34,896 | 39,105 | 38,828 | 38,944 |
| Retail sales of food group, monthly rate | Million dollars | 5,759 | 7,437 | 7,523 | 8,209 | 8,181 | — |
| Employment and Wages: ⁵ | | | | | | | |
| Total civilian employment | Millions | 74.4 | 79.1 | 80.1 | ⁹ 82.5 | ⁹ 82.5 | ⁹ 82.8 |
| Agricultural | Millions | 3.8 | 3.4 | 3.4 | ⁹ 3.7 | ⁹ 3.5 | ⁹ 3.6 |
| Rate of unemployment | Percent | 3.8 | 5.9 | 6.0 | 5.5 | 5.2 | 5.2 |
| Workweek in manufacturing | Hours | 40.6 | 39.9 | 40.7 | 40.7 | 40.9 | 41.0 |
| Hourly earnings in manufacturing, unadjusted | Dollars | 2.83 | 3.56 | 3.69 | 3.86 | 3.89 | 3.95 |
| Industrial Production: ⁵ | | | | | | | |
| | 1967 = 100 | — | 107 | 108 | 117 | 118 | 119 |
| Manufacturers' Shipments and Inventories: ⁵ | | | | | | | |
| Total shipments, monthly rate | Million dollars | 46,449 | 55,580 | 57,740 | 64,725 | 66,741 | — |
| Total inventories, book value end of month | Million dollars | 84,599 | 101,665 | 101,665 | 106,008 | 106,520 | — |
| Total new orders, monthly rate | Million dollars | 46,763 | 55,473 | 57,883 | 65,454 | 68,027 | — |

¹ Ratio of index of prices received by farmers to index of prices paid, interest, taxes, and farm wage rates. ² Average annual quantities of farm food products purchased by urban wage-earner and clerical worker households (including those of single workers living alone) in 1959-61—estimated monthly. ³ Annual and quarterly data are on 50-State basis. ⁴ Annual rates seasonally adjusted fourth quarter. ⁵ Seasonally adjusted. ⁶ As of March 1, 1967. ⁷ As of March 1, 1971. ⁸ As of March 1, 1972. ⁹ Beginning January 1972 data not strictly comparable with prior data because of adjustment to 1970 Census data.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Monthly Retail Trade Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).

UNITED STATES GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS, WASHINGTON, D.C. 20402
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

POSTAGE
& FEES PAID
U.S. DEPT.
OF
AGRICULTURE
AGR 101



3079 TRRERO500A122 18038 0001
TRI-AGENCY READING ROOM
500 12TH STREET NW #505
WASHINGTON DC 20250

The Farm Index

☆U.S. Government Printing Office 1973: 511-942/7